



19 CROSBY DRIVE
BEDFORD, MASSACHUSETTS 01730
617-275-2970

C-583-8-8-30
August 5, 1988

Final Preliminary Assessment
Becton Dickinson and Co.
North Canaan, Connecticut

TDD No. F1-8803-02
Reference No. S375CTJ9PA
CERCLIS No. CTD001139831

INTRODUCTION

The NUS Corporation Field Investigation Team (NUS/FIT) was requested by the Waste Management Division of the Region I U.S. Environmental Protection Agency (EPA) to perform a Preliminary Assessment (PA) of the Becton Dickinson and Co. facility located in North Canaan, Connecticut. The PA was completed under Technical Directive Document (TDD) Number F1-8803-02, issued in March, 1988.

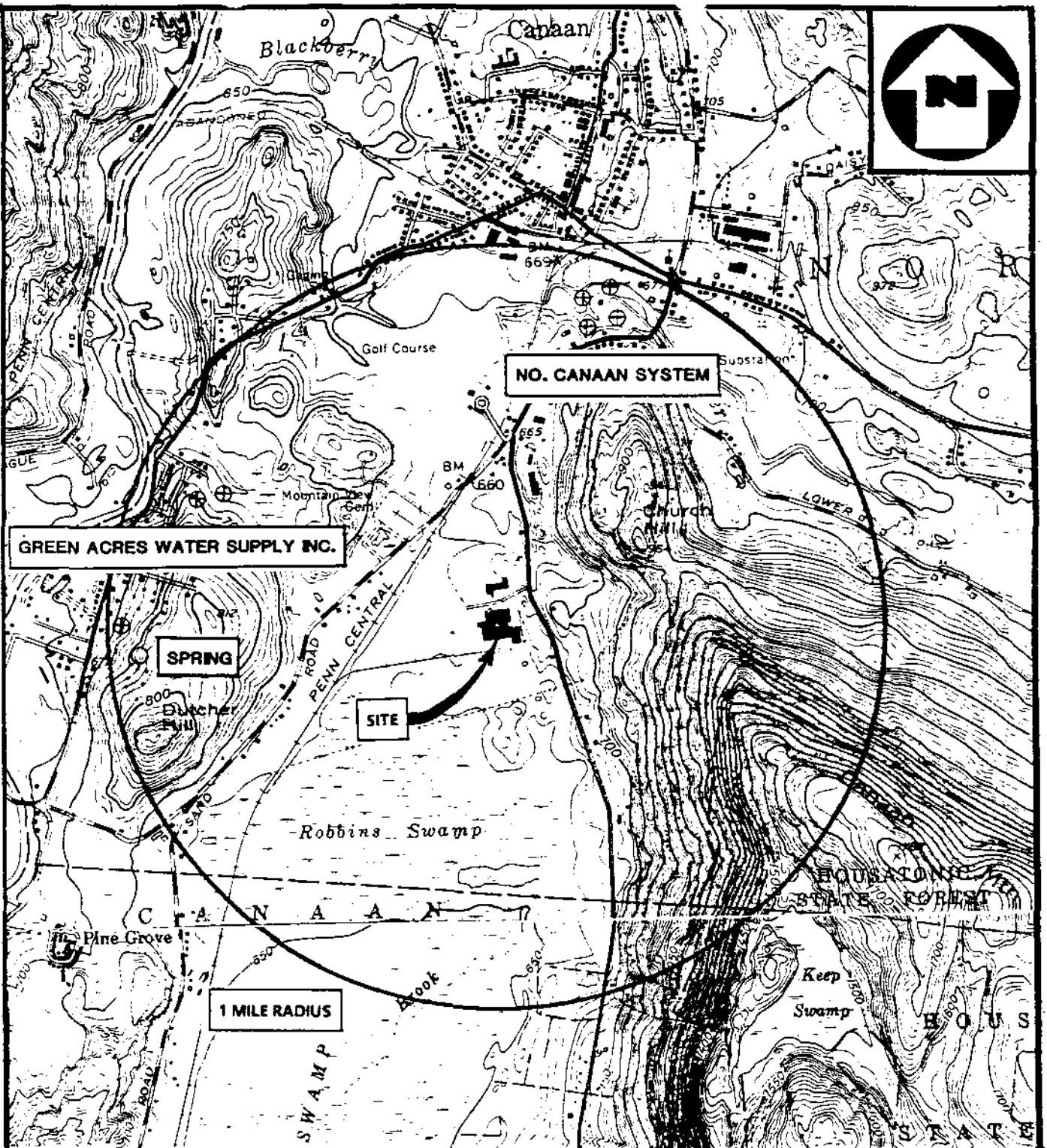
This PA complies with the requirements set forth under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended. It does not necessarily fulfill the requirements of other EPA regulations such as those under the Resource Conservation and Recovery Act (RCRA). The PA is not intended to be a definitive study of the site, and therefore is not suitable for use in planning a site remediation or undertaking enforcement actions against potentially responsible parties. The PA represents the first step of the site screening process set forth by the National Contingency Plan (NCP).

The Connecticut Department of Environmental Protection (CT DEP) requested that EPA investigate the facility. Because of historic dumping of solvents to the septic system at the facility, it is on Connecticut's inventory of potential hazardous waste sites (CT DEP, 1987). This PA has been reviewed by both EPA and the CT DEP.

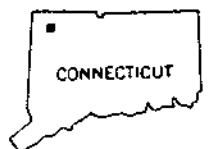
FACILITY DESCRIPTION AND HISTORY

The Becton Dickinson and Co. facility (Becton Dickinson) is located at the intersection of Rte. 7 and Grace Way in North Canaan, Connecticut (Figure 1). The facility is owned by Becton Dickinson and Co. in Rutherford, New Jersey. The property consists of 73 acres of land (Robinson, K., 1988a). NUS/FIT personnel conducted a perimeter survey of the facility on March 17, 1988, at which time it was in operation. Upon entering Grace Way, the Becton Dickinson Driveway forks off to the left (south). There is a visitor parking area between the driveway and the east side of the building. At the end of the driveway there are at least two towers or tanks, and a vapor emission coming from this area was observed. At the north side of the building, adjacent to Grace Way, there is a shipping and receiving area within a large fenced-off employee parking lot. One of the gates was open. *There is a small building at the end of Grace Way, adjacent to this parking lot. Between the west side of the building and an artificial hill covered with grass, there is a little shack. On top of the shack there is a tank, and a vapor emission coming from this area was observed (Figure 2) (NUS/FIT, 1988).*

Another Company is located on the north side of Grace Way. Becton Dickinson is located in a heavily wooded area so that Robbins Swamp could not be seen, nor could any homes be seen from the facility (NUS/FIT, 1988). The nearest homes are approximately 450 feet to the south of the facility on the same side of Rte. 7 and 500 feet to the east, across Rte. 7 (USGS, 1969a). Becton Dickinson is located in a flat area, but across Rte. 7 there is a steep hill (NUS/FIT, 1988). The facility is located in a



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' U.S.G.S. QUADRANGLE(S):
 SOUTH CANAAN, CT 1956, PHOTOREVISED 1969 ASHELY FALLS, MA-CT 1958, PHOTOREVISED 1969

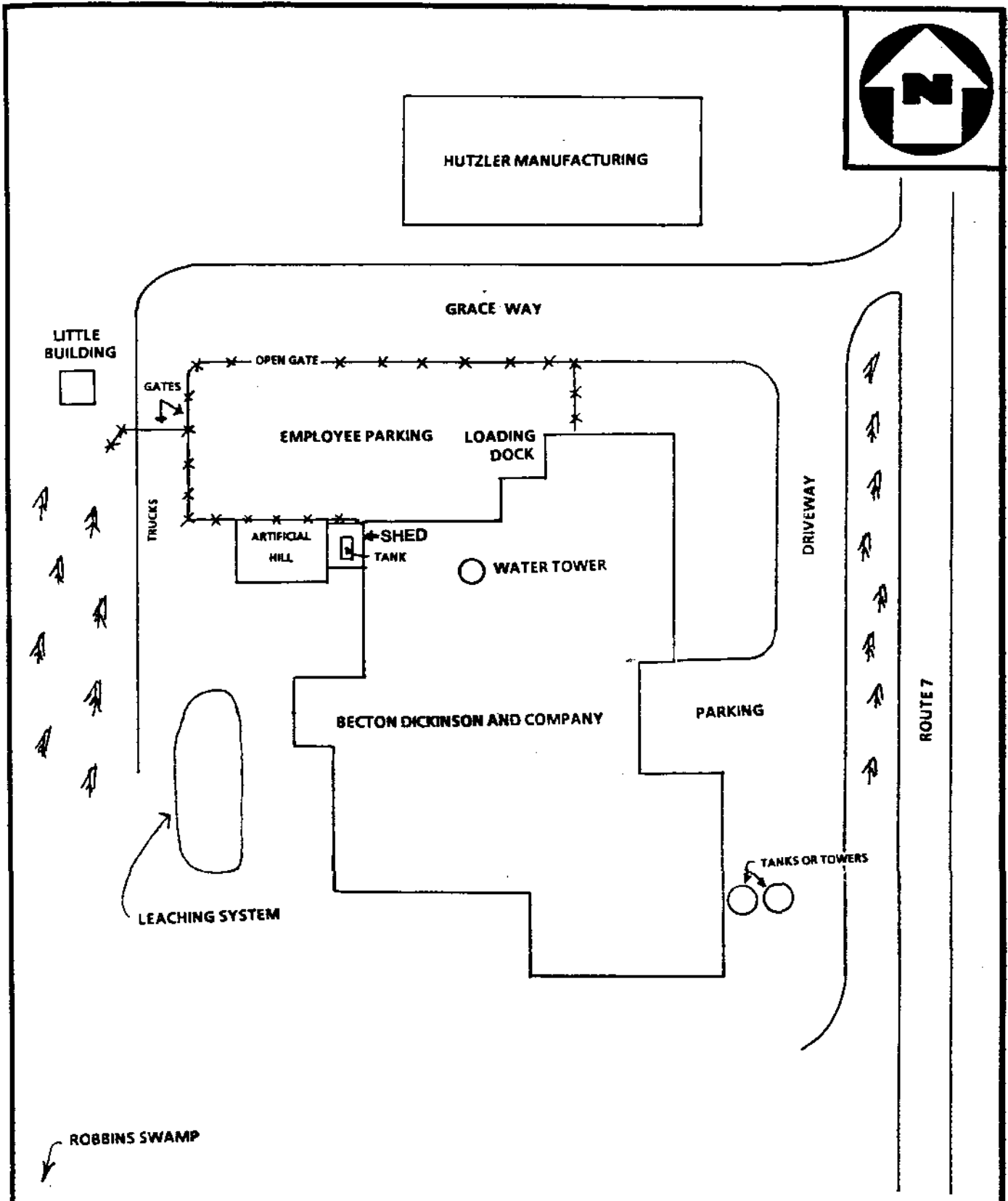


LOCATION MAP

**BECTON DICKINSON AND COMPANY
 NORTH CANAAN, CT**



FIGURE 1



NOT TO SCALE

ADAPTED FROM SITE SKETCH ATTACHED TO CT DEP FORM P-5 FOR BECTON DICKINSON AND COMPANY

SITE SKETCH

BECTON DICKINSON AND COMPANY
NORTH CANAAN, CT



FIGURE 2

partly industrial, partly residential area of Rte. 7. North Canaan center, approximately 1.1 miles to the north, is a commercial area.

Becton Dickinson manufactures syringes. At the time of a CT DEP Hazardous Waste Inspection conducted in 1986, the approximate quantities of wastes drummed at the facility included 1,1,1-trichloroethane (1 drum/2 months), ethylene glycol (or propylene glycol) and water (18 gallons per month or gpmo), chlorinated solvents and ink (1 drum/2 months), waste hydraulic oil (25 drums/year), and #4 oil/Kerosene (1 drum/4 months). The drums were removed by various transporters. Alkaline cleaner (94 gpmo) and amitron soluble oil (2-3 gpmo) were discharged to the city sewer. The use of "EDM" machines, a closed circuit chrome rinse, and acetone thinners reportedly produced no waste. Condensation wastewater contaminated with ethylene oxide from the syringe sterilization process was discharged to the onsite septic system (CT DEP, 1986). A CT DEP memo dated 1974 stated that the facility used 1000 gallons of ethylene oxide per day (Gove, J., 1974). Other chemicals used at the facility before 1986 include toluene, Solvent 304, Butyl Cellosolve (2-Butoxy ethanol), and Safety Kleen (CT DEP, 1984a). The first inspection of the facility was conducted by the CT DEP in 1981 (Robinson, K., 1988b).

Becton Dickinson notified EPA on August 8, 1980 of its RCRA Underground Injection Control status as a TSD facility (CT DEP, 1984; US EPA, 1988). The waste code is U115, ethylene oxide, which is classified as ignitable and toxic (US EPA, 1980, 1988). The permit status code is 5, indicating Part A was withdrawn because it never met criteria. No other waste codes are given for the facility (US EPA, 1988). During the 1986 CT DEP inspection, the inspector indicated that Becton Dickinson was acting as a small quantity generator (CT DEP, 1986).

On November 23, 1981 a Permit Order (No. 3153) was issued to Becton Dickinson by the Connecticut Commissioner of Environmental Protection. This Order permitted the discharge of 16,750 gallons per day (gpd) of domestic sewage to the town of North Canaan sewerage system (Serial 001) and 13,750 gpd of sterilization wash waters to the groundwaters in the watershed of Swamp Brook (Serial 002) (CT DEP, 1981a). Becton Dickinson was also required to monitor Serial 002 monthly and conduct a hydrogeologic study to examine the possible effects on the groundwater and surface water of its long standing disposal of ethylene oxide and ethylene glycol to a leaching field (Moore, RE, no date; CT DEP, 1981a). The permit application stated that this practice had commenced in 1964 (Becton Dickinson, 1981).

On February 4, 1982 an NPDES permit (No. 81-116 CT0024023) was issued to Becton Dickinson for two separate discharges totaling a discharge of 60,500 gpd of non-contact cooling water "directed to the northern end of Robbins Swamp" (CT DEP, 1981b and 1982). The permit expired in February 1987 and was not reissued (Robinson, K., 1988c).

As of 1984, there were four boilers at the facility with air permits, and no violations had been reported. Until March 1982, ethylene oxide was discharged to the atmosphere (CT DEP, 1984b).

A summary of events involving the facility is as follows:

- November 4, 1977 - A CT DEP Water Compliance Inspector completed a P-5 form and sketch of Becton Dickinson. The sketch placed the leaching field at the west side of the facility (Figure 2) (CT DEP, 1977).
- March 17, 1980 - The CT DEP responded to a complaint that 110 gallons per week of solvents were being discharged at the rear of the building (Senack, R.W., 1980; Robinson, K. 1988b).
- March 17, 1980 - The Maintenance Superintendent at Becton Dickinson stated that the cleaning or solvent wastes (including Hexcel F0304 and 519A, Axothene, Kerosene and Butyl Cellosolve) were discarded by plant personnel at the municipal refuse disposal site.

The Superintendent was directed to collect all waste solvent in quality drums and to store them in a secure area for collection by a licensed waste hauler (Senack, R.W., 1980).

- April 14, 1980 - A grab sample taken from a waste collection drum analyzed at the CT Department of Health (DOH) was reported to contain volatile organic compounds including a concentration of 310 g/L (parts per thousand) of 1,1,2,2-tetrachloroethylene (CT DOH, 1980).
- October 12, 1981 - Malcolm Pirnie, Inc. reported to the CT DEP the results of an analysis of the wastewater from the sterilization process and found maximum concentrations of 12,000 mg/L (parts per million or ppm) of ethylene oxide and 5,204 mg/L (ppm) of ethylene glycol (Malcolm Pirnie, Inc., 1981).
- November 23, 1981 - Permit Order No. 3153 was issued to Becton Dickinson permitting the discharge of water containing ethylene oxide and ethylene glycol to the groundwater (CT DEP, 1981a).
- December 12, 1981 - CT DEP conducted a Hazardous Waste Inspection of Becton Dickinson.
- 1981-1982 - Malcom Pirnie, Inc. prepared hydrogeologic reports for Becton Dickinson which were reviewed by the CT DEP in March 1982 (Marin, P., 1982). Nested wells were installed to the north, south, and east of the facility. These wells and surface waters to the west of the facility were sampled (Becton Dickinson, 1982).
- February 4, 1982 - An NPDES Permit Order (No. 3208) was issued to Becton Dickinson permitting the discharge of cooling water to Robbins Swamp and placing restrictions on the discharges (CT DEP, 1982).
- January 1983 - Malcolm Pirnie, Inc. analyzed the sterilizing wastewater discharge and reported maximum concentrations of 3,930 mg/L (ppm) ethylene oxide and 192 mg/L (ppm) ethylene glycol. Flash points were determined to be $> 60^{\circ}$ (Lauria, J.M., 1983).
- March 10, 1983 - Becton Dickinson requested to be delisted as a TSD facility (letter states they had previously applied for interim status).
- March 1, 1984 - The CT DEP completed a Preliminary Assessment (PA) of Becton Dickinson which stated that before November 1981, 160 gpm of sodium hydroxide were discharged to a leaching field, as were (according to rumor) 1 drum per month of trichloroethane (CT DEP, 1984b). The PA stated that ethylene oxide levels in groundwater samples taken from the wells were reported to be less than 0.5 mg/L (ppm) (CT DEP, 1984b).
- July 1984 - CT DEP conducted a Hazardous Waste Inspection of Becton Dickinson (Robinson, K., 1988b).
- October 11, 1984 - A Notice of Violation (No. 0166) was issued to Becton Dickinson by the CT DEP Hazardous Waste Management Section (Hitchcock, S.W., 1984).
- 1984 - Becton Dickinson ceased mixing the hydraulic waste oil with 1,1,1-trichloroethane waste in late 1984. A cleanup of the contaminated oil generated 25 drums which were removed by Tri-S in 1985. Currently the oil and 1,1,1-trichloroethane are handled as two separate waste streams and stored in separate containers (Robinson, K., 1988b).
- December 8, 1986 - CT DEP conducted a Hazardous Waste Inspection of Becton Dickinson.

- August 1987 - An anonymous complaint was received by the CT DEP which stated that at least until fall 1981 cleaning solvents used in the maintenance area at Becton Dickinson were dumped onsite along a dirt road off the truck service area. A CT DEP memo noted that in 1980 the truck service area was on the north side and was relocated in 1984-1985 to the west side (Robinson, K., 1988b).

The Bridgeport Hydraulic Co., Litchfield Division, North Canaan System services the area where Becton Dickinson is located and owns four wells and one reservoir within one mile of the facility. Green Acres Water Supply Inc. owns 3 wells within one mile of the facility (Figure 1) (CT DEP/NRC, 1982). The estimated population served by public water supplies located within a 3-mile radius of the facility is 2,100 people (Robinson, K., 1988d). The CT DEP water quality classification in the immediate area of the facility is GB/GA, indicating it presently may not be suitable for direct human consumption without need for treatment (Murphy, J.E., 1987). The State's goal is to restore the groundwater to drinking quality. There are three water supply wells at the facility (CT DEP, 1986). It is unknown if any are currently in use.

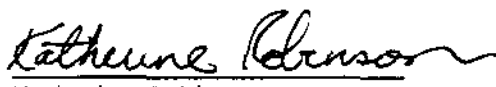
Robbins Swamp is located approximately 1,200 feet to the south of the facility (USGS, 1969a). The Housatonic River is approximately 1.0 mile to the northwest of the facility. The Housatonic River has a CT DEP surface water quality classification of D/Bc (Murphy, J.E., 1987). A classification of D/Bc indicates that the River is severely polluted and the State's goal is to upgrade its quality to Bc, which is suitable for recreational use, wildlife habitat, agricultural and industrial supply, and cold water fisheries (Murphy, J. E., 1987). The Housatonic River's recreational use is limited due to contamination with PCBs originating upstream, in Pittsfield, MA. In 1972, a ban prohibiting fishing was posted along the river (Robinson, K., 1988e). Now fishing is permitted as long as the fish are thrown back (Robinson, K., 1988f).

Fences at the Becton Dickinson facility do not prevent the public from gaining access to the property. Since contaminants are known to have been disposed of onsite, there is possibly a public risk due to direct contact with wastes at the facility.

CONCLUSION

Condensation water containing ethylene oxide was discharged to a leaching field beginning in 1964 and to the groundwater following 1981. Malcolm Pirnie, Inc. investigated the impacts of this practice, and as of March 1984, ethylene oxide concentrations in groundwater monitoring wells were < 0.5 mg/l (ppm). There have also been allegations that solvents and sodium hydroxide were dumped onsite. Due to documented release of ethylene oxide and ethylene glycol to the groundwater, and insufficient knowledge of past and present solvent disposal practices at the facility, NUS/FIT recommends that a Screening Site Inspection be conducted at a high priority.

Submitted By:


Katherine Robinson
Project Manager

Approval: 
Joanne O. Morin
FIT Office Manager

KR/kk

REFERENCES

- Becton Dickinson & Co. 1981. Application for State Discharge Permit, June 12.
- Becton Dickinson & Co. 1982. Letter to Mr. Walter Sinnott (CT DEP), August 27.
- Becton Dickinson & Co. 1983. Letter to Mr. Bill Torrey (EPA), March 10.
- CT DEP. 1977. Form P-5 and attached sketch, Becton Dickinson Co., Inc. Completed by Connecticut Department of Environmental Protection, November 4.
- CT DEP. 1981a. Permit Order No. 3153 issued to Becton Dickinson by the Commissioner of Environmental Protection, November 23.
- CT DEP. 1981b. "Public Notice of intent to approve an NPDES permit for the following existing discharges into the waters of the State of Connecticut," December 14.
- CT DEP. 1982. NPDES Permit CT0024023 and Order No. 3208 issued to Becton Dickinson by the Commissioner of Environmental Protection, February 4.
- CT DEP. 1984a. Hazardous Waste Inspection Checklist, Becton Dickinson and Company. Inspected by the Connecticut Department of Environmental Protection, July 13.
- CT DEP. 1984b. Preliminary Assessment of Becton Dickinson Co., EPA Form 2070-12 completed by K. McCann, March 1.
- CT DEP. 1986. Hazardous Waste Inspection Checklist, Becton Dickinson. Inspected by the Connecticut Department of Environmental Protection, December 8.
- CT DEP. 1987. Inventory of Hazardous Waste Sites in Connecticut. Connecticut Department of Environmental Protection, January.
- CT DEP/NRC. 1982. Atlas of the Public Water Supply Sources & Drainage Basins of Connecticut. Connecticut Department of Environmental Protection, Natural Resources Center.
- CT DOH. 1980. ~~Report of Laboratory Examination~~, Connecticut Department of Health Services, Laboratory Division, Becton Dickinson & Co., Inc. Specimen No. 7835-7836, April 14.
- Gove, J. (CT DEP). 1974. "Becton Dickinson & Co., No. Canaan," interdepartment message to Robert Taylor (CT DEP), February 18.
- Hitchcock, S.W. (CT DEP). 1984. Letter to Mr. Ron Boyles (Becton Dickinson), Notice of Violation No. 0166, October 11.
- Lauria, J.M. (Malcolm Pirnie). 1983. Letter to Mr. Robert Leonard (Becton, Dickinson and Co., Inc.), February 7.
- Malcolm Pirnie, Inc. 1981. Letter to Mr. Robert M. Leonard (Becton Dickinson and Co.), October 12.
- Marin, P. (CT DEP). 1982. "Becton, Dickinson and Company, Canaan, Connecticut: Hydrogeological Report," interdepartment message to Michael Harder, March 3.

Moore, R.E. (CT DEP). No date. "Order 3153," interdepartment message to Stanley J. Pack, 1981?

Murphy, J.E. 1987. Water Quality Classifications Map of Connecticut. Connecticut Department of Environmental Protection, Water Compliance Unit.

NUS/FIT. 1988 (issued). Logbook No. 88-1135. Becton Dickinson., TDD No. F1-8803-02. Perimeter Survey Information.

Robinson, K. (NUS/FIT). 1988a. Telecon with North Canaan Tax Assessor's Office, RE: Becton Dickinson property, March 31, 0925 hours.

Robinson, K. (NUS/FIT). 1988b. Project Notes: CT DEP File Search Notes. Becton Dickinson, dated March 17.

Robinson, K. (NUS/FIT). 1988c. Telecon with Christine Yario (CT DEP/WCU), RE: Becton Dickinson NPDES permit history, March 23, 1030 hours.

Robinson, K. (NUS/FIT). 1988d. Project Notes: population served by public water supplies located w/in 3 miles of facility. Becton Dickinson, dated March 15.

Robinson, K. (NUS/FIT). 1988e. Telecon with Frank Barttolomew (CT DEP/PCB-Toxics Group), RE: PCBs in the Housatonic River, March 31, 1015 hours.

Robinson, K. (NUS/FIT). 1988f. Telecon with North Canaan Town Clerk, RE: Recreational uses of the Housatonic River, March 30, 0205 hours.

Senack, R.W. (CT DEP). 1980. "Canaan-Becton, Dickinson & Co., Inc. solvent & Cleaning agent use and disposal method," interdepartment message to Mike Harder, March 25.

US EPA. 1980. "Identification and Listing of Hazardous Waste (40 CFR Part 261)," Federal Register. Vol. 45, No. 98: p. 33126. US Environmental Protection Agency, May 19.

US EPA. 1988. RCRA Hazardous Waste Handlers Report, Region I. US Environmental Protection Agency, July 30.

USGS. 1969a. Ashley Falls Quadrangle, Massachusetts - Connecticut. U.S. Geological Survey, 7.5' Series (topographic). 1958, photorevised in 1969.

USGS. 1969b. South Canaan Quadrangle, Connecticut. U.S. Geological Survey, 7.5' Series (topographic). 1956, photorevised 1969.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE
CT

02 SITE NUMBER
D001139831

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)

Becton Dickinson and Co.

02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER

Rte. 7 and Grace Way

03 CITY

North Canaan

04 STATE

CT

05 ZIP CODE

06018

06 COUNTY

Litchfield

07 COUNTY CODE

005

08 CONG DIST

06

09 COORDINATES

LATITUDE

42° 00' 40" N

LONGITUDE

73° 20' 00" W

10 DIRECTIONS TO SITE (Starting from nearest public road)

Take Rte. 44 West to North Canaan; Turn left onto Rte. 7 South. Becton Dickinson and Co. is on the right (west).

III. RESPONSIBLE PARTIES

01 OWNER (If known)

Becton Dickinson and Co.

02 STREET (Business, mailing, residential)

Cornelia Street

03 CITY

Rutherford

04 STATE

NJ

05 ZIP CODE

07073

06 TELEPHONE NUMBER

(201) 460-2000

07 OPERATOR (If known and different from owner)

Ron Boyles, Engineer

08 STREET (Business, mailing, residential)

Rte. 7

09 CITY

North Canaan

10 STATE

CT

11 ZIP CODE

06018

12 TELEPHONE NUMBER

(203) 824-5487

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE

☐ B. FEDERAL

☐ C. STATE

☐ D. COUNTY

☐ E. MUNICIPAL

☐ F. OTHER

(Agency name)

☐ G. UNKNOWN

(Specify)

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3001 DATE RECEIVED: 08/08/80

☐ B. UNCONTROLLED WASTE SITE (CERCLA 103c) DATE RECEIVED:

☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION

BY (Check all that apply)

☒ YES

☐ NO

DATE:

12/8/86

(last inspection)

☐ A. EPA

☐ B. EPA CONTRACTOR

☒ C. STATE

☐ D. OTHER CONTRACTOR

☐ E. LOCAL HEALTH OFFICIAL

☐ F. OTHER:

CONTRACTOR NAME(S):

(Specify)

02 SITE STATUS (Check one)

☒ A. ACTIVE

☐ B. INACTIVE

☐ C. UNKNOWN

03 YEARS OF OPERATION

1962

currently
operating

BEGINNING YEAR

ENDING YEAR

☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Water containing ethylene oxide discharged to leaching field since 1964. Reports of solvent and sodium hydroxide disposal onsite.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Contaminants could enter groundwater. Seven public wells are located within one mile of the facility. There are wetlands on the property.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)

☒ A. HIGH (Inspection required promptly)

☐ B. MEDIUM (Inspection required promptly)

☐ C. LOW (Inspect on time available basis)

☐ D. NONE (No further action needed, complete disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT: Richard Pease

02 OF (Agency/Organization): CT DEP

03 TELEPHONE NUMBER: 203-566-5486

04 PERSON RESPONSIBLE FOR ASSESSMENT: Katherine Robinson

05 AGENCY: NUS 06 ORGANIZATION: FIT 07 TELEPHONE NO: (617)275-2970 08 DATE: 7/15/88

Site Name: Becton Dickinson and Co.
CERCLIS No.: CTD001139831
TDD No.: FI-8803-02
Reference No.: 8375 CTJ9PA

NPL ELIGIBILITY CHECKLIST

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
Are the wastes onsite considered hazardous as defined in CERCLA?	X	---	-----
*Sites covered by other authorities:			
Are the hazardous materials at the site solely petroleum products (gasoline, oil, natural gas)?	---	X	-----
Is the contamination at the site caused solely by pesticides that were applied using an accepted practice?	---	X	-----
If the release is into public or private drinking water systems, is it due to deterioration of the system through ordinary use?	---	X	-----
Is the release from products which are part of the structure, and result in exposure within residential, business, or community structures?	---	X	-----
Did the release result in exposure to people solely within a work place?	---	---	unknown
Does the facility have an Underground Injection Control permit under the Safe Drinking Water Act?	---	X	never met criteria
Is the release the result of the normal application of fertilizer?	---	X	-----
Does the release involve naturally occurring substances in their unaltered form?	---	X	-----
Does the contamination at the site consist solely of radioactive materials generated by Department of Energy/Atomic Energy Commission activities?	---	X	-----
Is the contamination at the site caused solely by coal mining operations?	---	X	-----
Does the facility have a permit from EPA or the U.S. Army Corps of Engineers (under the Marine Protection, Research, and Sanctuaries Act) to dispose of dredged materials in ocean waters?	---	X	-----

Site Name: Beaton T. Kinson and Co-
CERCLIS No.: CTD001139831
TDD No.: FI-8803-02
Reference No.: S375CTJ9PA

	<u>YES</u>	<u>NO</u>	<u>COMMENTS</u>
*Other issues of site definition:			
Is the site defined solely as a contaminated well field?	---	X	---
Is the site currently owned or operated by a federal agency, or has it been in the past?	---	X	---
Is the site a municipal landfill?	---	X	---
-- Check if there is documentation of industrial waste disposed of.	---		
Does the waste consist of a "special waste" such as fly ash?	---	X	---
-- Check if there is documentation of a hazardous component to the waste.	---		
Does the facility have an NPDES permit?	---	X	expired 2/87
Check if the facility has a history of permit violations.	---		
Is the facility subject to ambient air quality standards under the Clean Air Act?	X	---	---
Does the facility have a permit under the Clean Air Act?	X	---	---
*RCRA status			
Has the facility notified as a RCRA generator?	X	---	TSD facility
Has the facility ever had RCRA interim status or a RCRA permit?	X	---	Part A withdrawn
If yes, check any that apply:			
-- The facility is a small quantity generator.	---		
-- The facility is a "non-notifier" or "protective filer" (identified as such by EPA or the state).	---		

Site Name:
CERCLIS No.:
TDD No.:
Reference No.:

*RCRA status (continued)

- The owner of the facility is bankrupt, or the owner has filed for protection under bankruptcy laws (if known). ---
- A RCRA compliance order or notice of violation has been issued for the facility at some time. X ---
- The order or notice concerned:
 - conditions that posed a hazard (i.e. a release of contamination to the environment) OR X ---
 - administrative violations (i.e. recordkeeping or financial requirements). ---
- Some RCRA enforcement action is currently pending at the facility. ---
- A RCRA permit has been denied or interim status has been revoked for the facility. ---
- The permit or interim status was revoked:
 - because of conditions at the facility that posed a hazard OR ---
 - because the facility failed to meet an administrative requirement (i.e., failed to file an acceptable Part B permit application). ---
- A closure plan has been requested or submitted for the facility under RCRA. ---
- A closure plan has been approved for the facility under RCRA. ---
- The facility is closed and currently monitoring under RCRA regulations. ---

(storage
over 90
days)

CERCLIS DATABASE FORM

Date: May 27, 1988

SITE NAME: Becton Dickinson and Co.

CERCLIS NO. CT00001139831

TDD No. FL-8803-02 PROJECT MANAGER: Katherine Robinson

Directions to site: Rte 44 West to North Canaan

Turn left onto Rte 7 South Becton Dickinson and Co. is on the right.

ELEMENT	CERCLIS CODE (NO.OF POSITIONS)	DESCRIPTION	ENTRY
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I. For all projects

State	C2(2)	Postal code	CT
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Site ID (if available) C101(12) Dun & Bradstreet or GSA

Site Name C104(40)

Becton Dickinson
and Company

Street Address C110(40)

Rte 7 and
Grace Way

City C111(25)

North Canaan

County *TBD

Litchfield

Ownership C136(2)

FF = Federally owned

ST = State owned

CO = County owned

DI = District owned

IL = Indian lands

MI = Mixed ownership

UN = Unknown

*TBD =Municipally owned

*TBD = Privately owned

OR = Other

Private

Years of .	
Operation	*TBD

1962 to currently operating 26

FMS Number
(if assigned) C315(4)

ELEMENT	CERCLIS CODE (NO.OF POSITIONS)	DESCRIPTION	ENTRY
Recommendation of Most Recent Project at Site	C2103(1)	For PAs: H = High = SI Required M = Med. = SI Recommended N = NFA = No Further Action/Pending I = Ineligible*under CERCLA For SIs: H = LSI Recommended D = Deferred N = NFA (No HRS Recommended)	#
Note	C2105(20)	Abbreviated Comments	_____
Reason for Ineligibility (for Sites Determined Ineligible under CERCLA)	*TBD	*TBD = Petroleum contamination only *TBD = Active RCRA facility *TBD = Properly applied pesticide *TBD = Nuclear/radioactive waste *TBD = All other reasons	_____
Agency Responsible for Work at Site	C2117(2)	F = EPA, Fund financed S = State, Fund financed SN = State, no fund financing FF = Federal facility *TBD = Responsible Party	F
II. Only for sites with HRS			
Coordinates	*TBD	Latitude and Longitude	_____

ELEMENT	CERCLIS CODE (NO.OF POSITIONS)	DESCRIPTION	ENTRY
Type of Facility or Source	C137(1)	B = Chemical Plant C = City Contamination L = Landfill M = Manufacturing Plant N = Military Facility F = Other Federal Facility T = Mines/Tailings P = Lagoons A = Abandoned/ Midnight dumping	
If Unknown, Type of Waste Present		R = Radioactive Waste J = Inorganic Waste *TBD = Organic Waste I= Other Industrial Waste D = Dioxin	
If Both Unknown, Type of Receptor Affected		V = Waterways/river H = Housing Area W = Drinking Water Wells *TBD = Ecological Receptors O = Other	

Abstract	C201(240)	Site Description



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
CT D001139831

II. SITE NAME AND LOCATION

01 SITE NAME (If appropriate, common or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER			
Becton Dickinson Co.	Rte. 7			
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE
North Canaan	CT	06018	Litchfield	005
08 COORDINATES	09 COORDINATES			
LATITUDE	LONGITUDE			

10 DIRECTIONS TO SITE (Starting from nearest public road)
From Hartford take Rte. 44 West to North Canaan. Take Rte 7 North.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
Corporate Headquarters	Mack Centre Dr.			
03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER	
Paramus	NJ	07652		
07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)			
Robert Leonard, Engr. Manager	Rte. 7			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER	
North Canaan	CT	06018	(203) 824-5487	

13 TYPE OF OWNERSHIP (Check one)

☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)

☒ A. RCRA 3001 DATE RECEIVED: 08/08/80 ☐ B. UNCONTROLLED WASTE SITE (RCRA 103) DATE RECEIVED: / / ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION	BY (Check all that apply)	
<input checked="" type="checkbox"/> YES DATE 12/18/81 <input type="checkbox"/> NO	<input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: (Specify)	
CONTRACTOR NAME(S):		
02 SITE STATUS (Check one)	03 YEARS OF OPERATION	
<input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN	1962 present UNKNOWN BEGINNING YEAR ENDING YEAR	

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED

ethylene oxide waste oil
1,1,1, trichloroethane Cobalt 60
Na OH

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

There was on site dumping before 11/81: Na OH - 160 g/mo. to a drain that went to a leaching field. EtO - 13,500 g/day (mixed w/H₂O) to a leaching field. Rumors that one drum per mo. of trichloroethane went to a leaching field. Ethylene oxide was discharged to the atmosphere until 3/82. There is a small swamp on the property.

V. PRIORITY ASSESSMENT

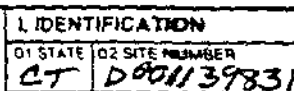
01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and exposures)	02 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and exposures)	
<input type="checkbox"/> A. HIGH (inspection required promptly)	<input type="checkbox"/> B. MEDIUM (inspection required)	<input checked="" type="checkbox"/> C. LOW (inspect on time available basis)
<input type="checkbox"/> D. NONE (no further action needed. Complete current disposition form)		

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Patrick F. Bawe	CT-DEP	(203) 566-8843
04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION
K. McCann	CT-DEP	Same
		07 TELEPHONE NUMBER
		(203) 566-8843
		08 DATE
		03/01/84

EPA FORM 2070-12 (7-81)

INFO. Gathered from DEP files only. No onsite assessment made.



03 WASTE CHARACTERISTICS (Check all that apply)

<input checked="" type="checkbox"/> A TOXIC	<input type="checkbox"/> E SOLUBLE	<input type="checkbox"/> I HIGHLY VOLATILE
<input checked="" type="checkbox"/> B CORROSIVE	<input type="checkbox"/> F INFECTIOUS	<input checked="" type="checkbox"/> J EXPLOSIVE
<input checked="" type="checkbox"/> C RADIOACTIVE	<input checked="" type="checkbox"/> G FLAMMABLE	<input type="checkbox"/> K REACTIVE
<input type="checkbox"/> D PERSISTENT	<input type="checkbox"/> H IGNITABLE	<input type="checkbox"/> L INCOMPATIBLE
		<input type="checkbox"/> M NOT APPLICABLE

CATEGORY	SUBSTANCE NAME	Q1 GROSS AMOUNT	Q2 UNIT OF MEASURE	Q3 COMMENTS
SLU	SLUDGE			
OLW	ONLY WASTE			
SOL	SOLVENTS	unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown		
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES	unknown		
MES	HEAVY METALS			

[illegible]

CATEGORY	D1 FEEDSTOCK NAME	D2 CAS NUMBER	CATEGORY	D1 FEEDSTOCK NAME	D2 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

State of Connecticut Dept. of Environmental Protection files:
Hazardous Waste Management
Water Compliance
Air Compliance



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

1. IDENTIFICATION

01 STATE 02 SITE NUMBER

CT D001139831

B. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☒ ALLEGED

Company has installed 3 nesting groundwater monitoring wells. So far EtO level is 0.5 mg/l. Prior to 11/81 there was on site dumping to a leaching field: Na OH (1605/mo.); EtO & H₂O (13,500 g/day); one drum of trichloroethane per month.

01 ☒ B SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

Same as above

01 ☒ C CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

There are four boilers on site. They have air compliance permits. No violations have been reported.

01 ☒ D FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

Presence of trichloroethane

01 ☐ E DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

unknown

01 ☒ F CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

Former onsite dumping to a leaching field

01 ☒ G DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

See narrative under groundwater contamination

01 ☐ H WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

unknown

01 ☐ I POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED

02 ☐ OBSERVED (DATE _____)
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

unknown



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE CT 02 SITE NUMBER D001139831

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

unknown

01 ☐ K. DAMAGE TO FAUNA 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (include name(s) of species)

unknown

01 ☐ L. CONTAMINATION OF FOOD CHAIN 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

unknown

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
(Spills, runoff, seeping liquids, leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

on site dumping prior to 11/81

01 ☐ N. DAMAGE TO OFFSITE PROPERTY 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

unknown

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

unknown

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

unknown

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

unknown

III. TOTAL POPULATION POTENTIALLY AFFECTED: unknown

IV. COMMENTS

This assessment was made from info. available in CT-DEP files gathered by inspectors other than myself. No on-site assessment from a PA standpoint was made.

V. SOURCES OF INFORMATION (See specific references in 02. State files, laboratory analysis, etc.)

State of CT; Dept. of Environmental Protection files:
Hazardous Waste
Water Compliance
Air Compliance